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10/590,771

08/25/2006

Hideki Ikarashi

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EXAMINER

BROOKS, JERRY L.

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/590,771	<b>Applicant(s)</b> IKARASHI ET AL.	
	<b>Examiner</b> JERRY BROOKS	<b>Art Unit</b> 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 08/25/2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/25/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/25/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 1, 3, 4 are objected to because of the following informalities:

(i) claim 1 line 13, "the display range" should read "a display range."

(ii) claim 3 line 3, "the changing/switching conditions" should read "changing/switching conditions."

(iii) claim 4 line 2, "the changing/switching conditions should read "changing/switching conditions."

Appropriate corrections are required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the "second display means for displaying first predetermined information" is a means plus function limitations that invokes 35 U.S.C. 112, sixth paragraph. However specification fails to clearly define the structure for "second display means for displaying first predetermined information" since "the second display means

Art Unit: 2851

for ...” is said to comprise “light-emitting elements 22 composed, for example, of light-emitting diodes (paragraph 0036, lines 1-5)” and the term “for example” renders the defining structure vague and indefinite. For the purpose of examination, the examiner interprets “the second display means” to comprise light-emitting elements selected as desired.

Furthermore, “control means for controlling operating states” of line 5 in claim 1 is a means plus function limitations that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material or acts for the claimed function. Paragraph 0023, lines 1-13 states that “control means for controlling operating states ” is comprised by a program storage means (104), a storage means (105), a display drive means (106), a backlight drive means (107), a meter drive means (108), and a meter light-source means (109) which describes components of the claimed “control means for ...” but lack definite structure. For the purposes of examination, the examiner interprets control means for controlling operating states as any elements which control operating states.

Applicant is required to:

(a) Amend the claim so that the limitation will no longer be a means plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it clearly links or associates the corresponding structure or material to the claimed function without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material or act so that one of ordinary skill in the art would recognize what structure, material, or acts performs the claim function, applicant is required to clarify the record by either:

(a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a))

(b) Stating on the record where the corresponding structure, material, or acts which are implicitly or inherently set forth in the written description of the specification that perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP 608.01(o) and 2181.

Regarding claim 2: claim 2 is directed to a method of displaying vehicle information. However claim 2 lacks positive method steps or process.

For the purpose of examination the examiner has interpreted the claim as follows:

A method of displaying vehicle information comprising:

displaying a first display image which provides a first predetermined information and whose display state is partly switched between a displayed state and a hidden state, and a second display image which provides a second predetermined information and whose display range is enlarged and reduced in a predetermined display area,

Art Unit: 2851

characterized in that a part of the first display image is switched to the hidden state in association with enlargement of the display range of the second display image, and the part of the first display image is switched to the displayed state in association with reduction of the display range of the second display image.

Regarding claim 3: claim 3 recites the limitation "the predetermined information" in line 6. In claim 1, the limitations "first predetermined information" and "second predetermined information" are recited; thus it is unclear which predetermined information is referred to the "first", the "second", or both. For the purpose of examination, the examiner has interpreted "the predetermined information" as either the "first predetermined information" or "second predetermined information".

Therefore claims 1, 2, 3 and claims that depend therefrom (4-7) are vague and indefinite.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Nojima (5,764,139).

With respect to claim 2, Nojima discloses a method of displaying vehicle information comprising:

displaying a first display image (the screen image 110) which provide a first predetermined information (see fig.5) and whose display state is partly switched between a displayed state and a hidden state (see fig.6), and a second display image (shift information image: see **SHIFT** in figures 5 and 6) which provides a second predetermined information (shift information) and whose display range is enlarged and reduced in a predetermined display area (see fig.5 in which the display range is reduced and fig.6 in which the display range is enlarged), characterized in that a part of the first display image is switched to the hidden state (see fig.6 where part of the display image 110 is hidden by shift information image) in association with enlargement of the display range of the second display image (in fig. 6, when the display range of the second display image is enlarged, it covers part of the display image 110), and the part of the first display image is switched to the displayed state in association with reduction of the display range of the second display image (see fig.5 wherein the part which is hidden in fig. 6 is displayed in fig. 5).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being obvious over Hegg et al.(5,121,099) in Nojima et al. (5,764,139) and Kino (6,499,852).

With respect to claim 1, Hegg discloses a vehicle information display apparatus comprising (fig.1): first display means (11, pointer type display device) for displaying first predetermined information as a first display image (see fig.2); second display means (12, LCD: col.3, 14) for displaying second predetermined information (see fig.3) as a second display image; and control means for controlling operating states of the first and second display means (Hegg teaches that the first and second image sources can be displayed independently to provide a two-page display wherein the source to be displayed would be illuminated while the other source will not be illuminated; therefore a control means for controlling operating states of the first and second display means is implicitly disclosed. Furthermore a meter light source means for pointer device 11 (lights: col.3, lines 37-40), a meter drive means for pointer device (meter 11 must have a drive means in order to be functional), a display drive means for liquid crystal display 12 (display 12 must have a drive means in order to be functional), and a backlight drive means to the LCD ( LCD can be illuminated selectively: col.3, lines 35-40) as components of a control means are implicitly disclosed), and displaying the



Art Unit: 2851

first and second display images in a predetermined display area (window 19), characterized in that the first display means (11) is adapted to be capable of switching between a displayed state (wherein the source 11 is illuminated) and a hidden state (wherein the source 11 is not illuminated) of a part of the first display image (portions of display 11 can be selectively illuminated and thereby switched to a partly hidden and partly displayed state) the second display means (12) is adapted to be capable of enlarging and reducing the display range of the second display image (fig.3) (this can be achieved by enlarging and reducing areas (portions) of illumination of the second display).

Hegg does not disclose the control means switches the part of the first display image into the hidden state in association with enlargement of the display range of the second display image and switches the part of the first display image into the displayed state in association with reduction of the display range of the second display image and the light emitting device of the first display means being an LED.

Nojima a vehicle information display apparatus wherein a display means (12) is adapted to be capable of enlarging and reducing the display range of a second display image (fig.3 image(1)) (In fig.3, image (1) is larger when image (2) is in a hidden state and smaller when both images are displayed), and a control means (fig.1, a microcomputer 16, a program storage and storage means ( col.3, lines 45-54) and a display drive means 12) switches the part of a first display image into the hidden state in association with enlargement of the display range of the second display image (image (2) is hidden when image (1) is largest) and switches the part of the first display image

Art Unit: 2851

into the displayed state in association with reduction of the display range of the second display image (In fig.3, image (1) is smaller when both images are displayed).

It would have been obvious at the time of invention to one of ordinary skill in the art to modify the invention of Hegg with the controller of Nojima to switch the part of the first display image into the hidden state in association with enlargement of the display range of the second display image and switches the part of the first display image into the displayed state in association with reduction of the display range of the second display image so that the driver of the vehicle can be provided with only the necessary amount of information (col.2, 40-47) .

Hegg in view of Nojima does not explicitly disclose the light emitting device of the first display means being an LED.

Kino discloses using an LED for the light emitting device of a meter device (col. 1, lines 5-10 ).

It would have been obvious at the time of invention to use the LED of Kino as the light source of the meter device (first display means) of Hegg in view of Nojima to directly illuminate the meter device (col. 1, lines 5-10 ).

With respect to claim 3, Hegg in view of Nojima and Kino discloses the vehicle information display apparatus according to Claim 1, Hegg does not disclose characterized in that the control means determines whether or not the changing/switching conditions for switching the display of the first display image in

Art Unit: 2851

association with the change of the display range of the second display image is satisfied according to the predetermined supplied information and, when the changing/switching conditions are satisfied, changes the display range of the second display image and switches the display of the first display image.

Nojima discloses a vehicle information display apparatus characterized in that the control means (fig. 1) determines whether or not the changing/switching conditions (see fig.2: order of priority and see steps s103, s104, s107, s108 of fig.3) for switching the display of the first display image (see image (2)) in association with the change of the display range of the second display image (see wherein if the range of the second display image (1) is changed, the first image (2) is switched) is satisfied according to the predetermined supplied information (according to the predetermined supplied information the priority of each display image is determined ) and, when the changing/switching conditions (see fig.2: order of priority and see steps s103, s104, s107, s108 of fig.3) are satisfied, changes the display range of the second display image and switches the display of the first display image (compare s105 to s106 wherein the display range of the second image (1) is changed and the display of the first display image is switched).

It would have been obvious at the time of invention to one of ordinary skill in the art to modify the invention of Hegg in view of Nojima and Kino with the controller of Nojima so that the driver of the vehicle can be provided with only the necessary amount of information (col.2, 40-47).

Art Unit: 2851

With respect to 4, Hegg in view of Nojima and Kino discloses the vehicle information display apparatus according to Claim I, Hegg does not disclose characterized in that the changing/switching conditions can be changed by a user.

Nojima discloses a vehicle information display apparatus characterized in that the changing/switching conditions can be changed by a user (col.8 lines 65 - col.9 lines 1-2).

It would have been obvious at the time of invention to one of ordinary skill in the art to modify the invention of Hegg in view of Nojima and Kino with the teaching of Nojima so that the changing/switching conditions can be changed by the user to make the invention user friendly.

With respect to 5, Hegg in view of Nojima and Kino discloses the vehicle information display apparatus according to Claim I, characterized in that the first display means is a pointer-type display device (11), and the second display means (12) is an image display device for displaying a plurality of different contents or types of second predetermined information as the second display image in a multiplex or interchangeable manner (see col.3, lines 35-40).

Art Unit: 2851

With respect to 6, Hegg in view of Nojima and Kino discloses the vehicle information display apparatus according to Claim I, characterized in that the first display means (11) and the second display means (12) are arranged so as to oppose to each other with the intermediary of a transmissive reflecting member (13) that combines the respective display images by transmitting the display image on one of the first display means and the second display means and reflecting the display image on the other one of them (see light from 11 and 12 in fig.1).

With respect to 7, Hegg in view of Nojima and Kino discloses the vehicle information display apparatus according to claim 5, characterized (see fig.1) in that a concave surface mirror member (17) that reflects the first and second display images combined through the transmissive reflecting member (13) toward the user (observer) is further provided.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JERRY BROOKS whose telephone number is (571)270-5711. The examiner can normally be reached on Monday-Friday, 9 a.m.- 5 p.m..

Art Unit: 2851

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JERRY BROOKS/  
Examiner, Art Unit 2851

/Diane I Lee/  
Supervisory Patent Examiner, Art Unit 2851